PEHR KALM'S DESCRIPTION OF SPRUCE BEER

Translated and edited by ESTHER LOUISE LARSEN

Among the beverages used by Europeans in America there is one which is made from a species of spruce.¹ As noted in [Philip Mill[er], Gard-[

eners] Diction[ary (London, 1731)], speci[es] 5, the botanists list it as Abies Piceae folis brevibus conis minimis;² the English and Dutch call it spruce, and the French in Canada, épine
telle and épine
telle blanche.

This spruce, which is quite common in Canada, resembles our Swedish spruce so much that they might easily be mistaken for one another, were it not for the very small cones of the American spruce. It requires a cold climate, becomes quite rare in the English Provinces, and a little farther south almost entirely disappears. There, that is farther south, it is only found on the highest ridges and peaks of the so-called Blue Mountains,³ or on the north side of the same, where the snow lies longest in the spring and comes earliest in autumn. In Canada, it grows under exactly the same conditions as our Swedish spruce.

The French in Canada are the foremost brewers of this small beer. The Dutch, who live at Albany along the northern part of the Hudson River in the province of New York, also use it. Very few of the English outside of New England and Nova Scotia have the drink. This is the reason; the tree is common in Canada but so scarce near Albany that it is necessary to go several furlongs to find it. In the English Colonies, except for those previously mentioned, spruce is very difficult to find.

I did not have the opportunity to see how the Dutch make this small beer. I drank it often and found it very good. The description they gave me of their method of producing the drink is as follows.

If, for example, water to the amount of a firkin is used, it is poured into a copper kettle and set on the fire. About a stoup, or as much as can be held in the hollow of two hands, of spruce twigs, from the spruce already mentioned, is then thrown into the kettle. If the twigs are fresh, a smaller quantity is used for the flavor is stronger, but if the twigs are dry more is used. The spruce twigs are cut into pieces about as fine as those which we cut for scattering on our floors or even finer. However, this is not important. In localities where it is necessary to travel long distances to obtain the spruce, a great quantity is brought home at one time. The twigs which are not immediately used are kept in a cold place until another time. These twigs become so dry that the needles fall, but for want of fresh material the dry needles and branches are used.

After the quantity of spruce twigs mentioned above has been added to the water in the kettle, the mixture is allowed to cool for about an hour before it is removed from the fire. The liquid is then poured into a vessel and allowed to stand until lukewarm. Yeast is added, and fermentation occurs. A skålpond of sugar is added to the brew to remove the resinous flavor.⁴

In order to preserve the brew when fermentation has ceased, it is put into casks, firkins, or better yet into bottles.

This drink keeps for a long time and is generally said to have the advantage of not souring as fast in summer as other drinks. It is of a clear brown color similar to near beer and has a good flavor. It tastes the least bit of turpentine and resin; however, this flavor is scarcely noticeable. When first poured from a bottle into a glass, it foams and bubbles a lot and is pleasant to drink. It is con-

¹ The article by Pehr Kalm which is here translated and edited by Mrs. Esther Larsen Doak appeared under the title, "Beskrifning på hvad sett dricka göres i Norra America af et slags gran," in the Kongl. Svenska Academien, Handlingar, 12:190-196 (1751). Literally translated, the title reads: Description of the way a kind of beer (or small beer) is made from spruce in North America. For other articles by Kalm which have been translated by Mrs. Doak, see Agricultural History, 17:172 (1943), 19:58, 254 (1945), and 21:75 (1947).—Everett E. Edwards.

² Picea canadensis (Mill.) BSP.

³ Apparently Kalm used the term "Blue Mountains" for all the mountains in the eastern part of the present United States. "These mountains which the English call the Blue Mountains, are of considerable height and extend in one continuous chain from north to south, or from Canada to Carolina."—A. B. Benson, ed., The America of 1750; Peter Kalm's Travels in North America, 1:65 (New York, 1937).

⁴ A skålpond or Swedish pound equals .937 pound avoirdupois.
considered very healthful, and among other things, it is said to be diuretic.

This is the account which the Dutch gave me of the brewing of this drink which they call spruce beer.

While in Canada I had several opportunities to see how the French made their beer from spruce. It should be noted that in Canada, beer and other drinks brewed from malt are never used and rarely mentioned. Wine imported from France is extremely expensive and is only used by the wealthy. Even they use the spruce beer because it is very healthful and quenches the thirst. The spruce is brewed in the following manner.

In order to brew enough small beer to fill one of our ordinary beer casks, a supply of spruce twigs is first obtained. The spruce twigs are brought home from the forest either at the time they are to be used or sometime before and stored in a cool place to prevent drying. The branches and needles of the current year are preferred for they make a better drink, and the resin in them is considered healthful. Two kettles of water are filled with branches and needles of the spruce mentioned above. The branches are not cut up as it is only essential that they be small enough to go into the kettle. Just enough water is put into the kettle to cover the spruce. The mixture is allowed to boil until only half of the water remains.

While the mixture is cooking a frying pan full of wheat is added. (It is said that rye can be used; barley is considered better than wheat or rye; and maize is by far the most desirable.) The grain, whether it be wheat, barley, or maize, is browned over the fire until almost black in the same fashion as we roast coffee. It must be stirred and turned many times. When the roasting is completed the grain is poured into the kettle and cooked with the spruce.

Several small loaves of bread made from wheat or other grain are put on the fire and allowed to become thoroughly scorched. They are then thrown into the kettle and cooked with the spruce and roasted grain. In order to brew two casks of small beer about two cups of roasted grain and ten small loaves of scorched bread are required.

The reasons for adding scorched bread and grain to the brew are as follows: first, to give a golden brown color to the beer which otherwise is not unlike water in color; second, to give the drink a pleasant taste; third, to make the drink more nourishing.

When the mixture has been allowed to cook until only half of the water remains and the bark of the twigs is beginning to loosen, the spruce twigs are taken out and thrown away. The liquid is then strained through a cloth into a tub in order to remove the remaining twigs, grain, and bread.

This process is repeated until enough liquid is obtained for several casks. Two or three stoups of syrup are added to the liquid, sometimes more, sometimes less. Thus the bitter taste which it has taken from the spruce twigs and resin is diminished, the flavor improved, and it is a delicious drink.

The wort is allowed to stand until cold, then either yeast or a piece of sourdough is added to the wort to cause fermentation. The scum and impurities which come to the top are skimmed off. When the fermentation is completed, the beer is put into barrels or filled into bottles which is even better. This briefly is the entire process.

The beer has all of the properties previously mentioned. In taste it vies with small beer. It is considered healthful. Most of the inhabitants, especially the French in Canada, have used the drink daily and find it does them a lot of good. Practically the only drink used by the officers and others at the forts is spruce beer.

Inasmuch as there is such a great similarity between the American and Swedish spruce it might be well to try to make such a healthful drink from our spruce either by this method or some other.